AMERICAN METEOROLOGICAL SOCIETY

meteorological

abstracts and bibliography

Cumulative Indexes, January–November, 1950

December, 1950 No. 12

METEOROLOGICAL ABSTRACTS AND BIBLIOGRAPHY

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ADMINISTRATIVE OFFICE: American Meteorological Society, Office of Executive Secretary, 3 Joy Street, Boston 8, Mass.

* Address all business communications, orders and inquiries to the Executive Secretary, Mr. Kenneth C. Spengler, 3 Joy Street, Boston 8, Mass. Exchanges and reprints may be sent direct to P. O. Box 1736, Washington 13, D. C.

METEOROLOGICAL ABSTRACTS AND BIBLIOGRAPHY is a monthly publication devoted to:

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SUBSCRIPTION RATE: $5.00 per year to members and non members. Single copies $0.75.

This publication has been made possible through support and sponsorship extended by the Geophysical Research Directorate of the Air Force Cambridge Research Laboratories, under Contract No. A. F. 19 (122) 82. It is published for technical information only and does not represent the recommendations or conclusions of the sponsoring agency.

METEOROLOGICAL ABSTRACTS AND BIBLIOGRAPHY

MALCOLM RIGBY, Editor

Vol. 1 DECEMBER, 1950 No. 12

Cumulative Subject and Author Indexes
(Vol. 1, No. 1–11)

(For complete table of contents see back cover)

Published monthly at Prince and Lemon Streets, Lancaster, Pa., by the AMERICAN METEOROLOGICAL SOCIETY, 3 Joy Street, Boston 8, Mass.

Printed and issued by: Lancaster Press, Inc.

PREFACE

This issue contains author and title, subject, geographical and journal indexes to approximately 4000 items which were *analyzed and classified* in the first eleven issues of this periodical. In addition some 1500 entries which were *not classified*, but which appear as parts (or contents) of composite publications (symposia, compendiums, journals, etc.) are indexed in the author index so the references would not be completely lost to those compiling bibliographies or searching for rare material.

The titles of articles have been entered in only one language; in most cases the language of the original article. If a translation of the title is desired the reader should refer to the actual abstract or entry, where he will find an English translation of every title originally in any other European language. Titles of Chinese, Japanese, Arabic and Hebrew articles are usually given in English only.

Of the 4,000 entries, about 2400 or 60% were originally written in *English*. (These represent publications from many countries; not necessarily English speaking.) Over 1,000 entries or 25% are for articles written in *German*, about 200 in *French*, 150 in *Russian*, 40 in *Italian*, *Dutch* and *Spanish* respectively, and from 10 to 30 in *Japanese*, *Swedish*, *Hungarian*, and *Czech*. In addition, several articles were in *Chinese*, *Danish*, *Finnish*, *Norwegian*, *Polish*, *Portuguese*, *Romanian* and *Serbian*.

These 19 languages represent articles contained in about 550 periodicals or serials published in over 40 countries, as can be seen in the Index of Journals (p. 949). The subject matter, likewise, is very broad in scope, representing as it does at least 20 major fields of interest related to meteorology and over 500 specialized subjects. Since these subjects are related to each other in such a complex manner, it is impossible to cover all of the subjects, which are thus interrelated, by cross references. Therefore, the reader should make use of the *Collected List of Subject Headings* (p. 932) to find possible related subjects. The general arrangement of the material in Part I of each issue, according to the Universal Decimal Classification System for Meteorology, will also help the reader to find related material in any field, however broad or specialized.

It has been our aim to make this index as accurate and free from discrepancies as possible. Experience has shown, however, that perfection in indexing is never attained where the index must be issued within a limited time after the original publications appeared. Biographical information (date and place of birth, scientific, governmental, or educational affiliations, etc.) forwarded to Meteorological Abstracts, P. O. Box 1736, Washington 13, D. C., will be appreciated, as it will help greatly in establishing authority for articles abstracted or indexed in future publications and in avoiding errors in indexing. Suggestions for improvement of the Index will be welcomed and will be considered in preparing future volumes.

LIST OF PERIODICALS

Note: In this list the preferred form of title for entry is given in bold face type. If the title is distinctive, the name and headquarters of the issuing society or organization follows the title. If the title is not distinctive the issuing organization precedes and is part of the title. For complete list of periodicals abstracted see p. 949.

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Akademiia Nauk, SSSR, Izvestiia, Ser. Geogr. i Geofiz., [Moscow].
American Geophysical Union, Transactions, National Research Council, Washington.
American Meteorological Society, Bulletin, [Boston].
Annalen der Meteorologie, Meteorologisches Amt für Nordwestdeutschland, Hamburg.
Annali di Geofisica, Istituto Nazionale di Geofisica, [Rome].
Archiv für Meteorologie, Geophysik und Bioklimatologie, Ser. A and Ser. B, [Vienna].
Australian Journal of Scientific Research, Ser. A, Physical Sciences, [Melbourne].
Ciel et Terre, Société Belge d'Astronomie, de Météorologie et de Physique du Globe. Uccle-Bruxelles.
Geofisica Pura e Applicata, Istituto Geofisica Italiano, [Milan].
Geophysical Magazine, [Central Meteorological Observatory, Toyko].
Hemel en Dampkring, Nederlandse Vereniging voor Weer- en Sterrenkunde, [The Hague].
Időjárás, Az Országos Meteorológiai és Földmágnességi Intézet, [Budapest].
Indian Journal of Meteorology and Geophysics, [Delhi].
Journal of Geophysical Research (formerly Terrestrial Magnetism and Atmospheric Electricity), [Washington].
Journal of Meteorology, American Meteorological Society, [Boston].
Journal Scientifique de la Météorologie, Société Météorologique de France, [Paris].
The Marine Observer, Air Ministry, Meteorological Office, London.
The Meteorological Magazine, Air Ministry, Meteorological Office, London.
Meteorological Society of Japan, Journal, Second Series, Kisho Shushi, [Tokyo].
Meteorologické Zprávy, Státní Meteorologický ústav v Praze, [Prague].
La Météorologie, Société Météorologique de France, [Paris].
Meteorologische Rundschau, Bad-Kissingen, [U. S. Zone, Germany].
Monthly Weather Review, U. S. Weather Bureau, Washington, D. C.
Nimbus, Sociedad Meteorológica de Bolivia, [La Paz].
Polarforschung, Archiv für Polarforschung in Kiel, [Kiel, British Zone, Germany].
Revista Meteorológica, Junta Nacional de Meteorología, Montevideo.
Rivista di Meteorologia Aeronautica, Associazione Culturale Aeronautica, [Rome].
Royal Meteorological Society, Quarterly Journal, [London].
Tellus, Svenska Geofysiska Föreningen, Stockholm.
Vsesoiuznoe Geograficheskoe Obshchestvo, SSSR, Izvestiia, [Moscow-Leningrad].
Weather, Royal Meteorological Society, [London].
Weather Development and Research Bulletin, Australia, Meteorological Branch, [Melbourne].
Weatherwise, Amateur Weathermen of America, Philadelphia.
Wetter und Leben, Österreichische Gesellschaft für Meteorologie, [Vienna].
Zeitschrift für Meteorologie, Meteorologisches Observatorium, Potsdam, [U. S. S. R. Zone, Germany].

★ Indicates those periodicals which are primarily meteorological.

ERRATA—VOLUME 1, 1950

Note: In the following list, only *important* errors are included. Discrepancies in style, punctuation, accents, capitalization, transliteration, subject headings, etc. are not as a rule listed; nor are errors in the *indexes* of each issue where these errors are corrected in this *volume index*. Errors of *fact* which have come to our attention, mistakes in spelling of the names of authors (where there is no alternative spelling), and major errors in title or journal entries *are* included. Other errors which may have been overlooked should be called to our attention (by post card addressed to Meteorological Abstracts, P.O. Box 1736, Washington 13, D. C.).

No. 1.
p. 2, *line* 23: *change* Richard Bray *to* Robert Bray.
p. 12, *item* 1–3, *line* 20: *change* reprinted in Spanish edition *to read* printed a section Spanish.
p. 14, *item* 1–11, *lines* 12 and 13: *delete sentence:* All articles . . . English.
p. 53, *item* A–56, *line* 1: *change* Letiz *to* Leitz.
p. 59, *item* A–120, *line* 2: *change* Procedures *to* Proceedings.
p. 63, *item* A–166, *line* 1: *change* Fiener *to* Feiner.
p. 70, *item* A–234, *line* 1: *change* Mukherjees *to* Mukherjee.
p. 72, *line* 3: *change* Hand *to* and.
p. 72, *line* 10: *change* Rossby, C-B *to* Rossby, C-G.

No. 2.
p. 85, *item* 2–11, *lines* 7 and 8: *delete* although the observatory . . . War.
p. 85, *item* 2–12, *line* 12: *change* I. R. Hand *to* I. F. Hand.
p. 91, *item* 2–43, *line* 1: *change* 551.508.79 *to* 551.508.81.
p. 92, *item* 2–44, *line* 1: *change* 551.508.79 *to* 551.508.81.
p. 92, *item* 2–45, *line* 1: *change* 551.508.79 *to* 551.508.81.

No. 3.
p. 186, *item* C–77, *line* 1: *change* Shiskin *to* Shishkin.
p. 190, *item* C–98, *line* 2: *change* No. 19 *to* No. 20.
p. 202, *item* C–182, *line* 1: *change* László, Aujeszky *to* Aujeszky, László.

No. 4.
p. 220, *item* 4–29, *line* 1: *change* Surand *to* Suraud.
p. 236, *item* 4–109, *line* 1: *change* Surand *to* Suraud
p. 248, *item* D–37, *line* 1: *change* Bilham, F. G. *to* Bilham, E. G.
p. 273, *line* 47: *change* Longley, Richard W. *to* Longley, Richmond W.

No. 5.
p. 284, *item* 5–6, *line* 1: *change* Watt-Watson *to* Watson-Watt.
p. 321, *item* E–121, *line* 1: *change* Brooks, Edmund *to* Brooks, Edward.
p. 327, *item* E–206, *line* 1: *change* Ruhle *to* Reihle.
p. 332, *item* E–289, *line* 1: *change* Gotz *to* Götz.
p. 353, *item* 6–50, *line* 1: *change* cvoistvakh *to* svoĭstvakh.

No. 6.
p. 377, *line* 14: *change* Choudhuri, S. N. Ray *to* Ray Choudhuri, S. N.
p. 377, *line* 48: *change* Gebhart, Etnesto *to* Gebhardt, Ernesto.

No. 7.
p. 435, *item* 7–77, *line* 1: *change* obrazonaniĭ *to* obrazovaniĭ.
p. 451, *item* G–23, *line* 2: *change* Visser *to* Visher.
p. 476, *line* 19: *change* Lyle Hansen, B. *to* Hansen, Lyle B.

No. 8.
p. 500, *item* 8–68, *line* 1: *change* Sutton, D. J. *to* Schove, D. J.
p. 506, *item* 8–100, *line* 4: *change* No. 25 *to* No. 251.
p. 549, *item* H–235, *line* 1: *change* Choudhuri, S. N. Ray *to* Ray Choudhuri, S. N.
p. 549, *item* H–239, *line* 1: *change* Rao, V. P. *to* Rao, Y. P.
p. 562, *line* 15, *col.* 1: *change* Szechwan Basin, Mass. *to* Szechwan Basin, China.

No. 9.
p. 565, *item* 9–15, *line* 1: *change* Sönnquist *to* Lönnqvist.
p. 566, *item* 9–18, *lines* 7 and 8: *change* operated by *to read* coordinated with.
p. 584, *item* 9–116, *line* 1: *change* Schluze *to* Schulze.
p. 600, *item* I–50, *line* 1: *change* Minos'ian *to* Minas'ian.
p. 610, *item* I–127, *line* 1: *change* Fuertes, F. A. *to* Alsina Fuertes, Fidel.
p. 611, *item* I–130, *line* 1: *change* Steinmitz *to* Steinmetz.
p. 614, *item* I–148, *line* 1: *change* Bishop, Richard D. *to* Bishop, Richard H.

No. 10.
p. 661, *item* 10–152, *line* 3: *change* Priroda, Moscow *to* Priroda SSSR.

No. 11.
p. 744, *item* K–79, *line* 1: *change* Frigyes, Dési *to* Dési, Frigyes.
p. 755, *item* K–162, *line* 1: *change* Land of Hydrology *to* Land hydrology.
p. 755, *item* K–162, *line* 2: *change* Gioromet *to* Gidromet.

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Note: In this index, the subjects have been arranged alphabetically as in a dictionary or glossary. Related subjects may be found by consulting *see also* references or, where broader coverage is desired, the classified Collected List of Subject Headings on page 932 should be consulted.

In order to save space, titles of articles have been omitted. These may be found by referring to the Author Index (page 777 of this issue), using the entry number as positive identification of the item. Further conservation of space has been effected by grouping together items when a large number of abstracts on the same, or nearly the same, subject appear in sequence (e.g., Tornadoes *see also* Special Bibliography on Tornadoes E–1 to E–298).

New concepts and additional experience necessitate constant revision of subject headings. Hence, this list will not agree in every case with entries found in the subject indexes of previous or future issues. Changes will not, however, be made without considerable justification.

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CUMULATIVE GEOGRAPHIC INDEX

In this index of geographical places there are three major sections:

A. **Hemispheres and Regions**
B. **Continents**
C. **Oceans, Seas and Islands**

An alphabetical or dictionary type of arrangement is followed for all divisions and subdivisions of these major groups. For example, in section B, the continents are arranged alphabetically as follows:

1. **Africa**
2. **Asia**
3. **Australasia**
4. **Europe**
5. **North America**
6. **South America**

Within each continent the regions, countries or main topographical features are in turn listed alphabetically. No attempt has been made to distinguish between political and geographical regions or sub-regions. For example, **Austria, Balkans, Central Europe, England, Germany, Great Britain,** etc. are listed consecutively under Europe.

Within each country all regions, states, provinces, cities or other geographical features falling entirely within that country form a single alphabetical list. In the United States cities are alphabetized under their respective states.

In section C the principal oceans and seas and their respective divisions have been arranged alphabetically. Islands not naturally associated with one or another of the continents have been assigned to the body of water with which they are located.

Australasia includes Australia, the East Indies and New Zealand; Madagascar is listed under Africa; Japan, the Kuriles and the Philippines under Asia and Greenland under North America.

The **Antarctic** includes the Antarctic continent and bordering seas. It has been arbitrarily assigned to section C on Oceans, Seas and Islands to preserve its analogy to the Arctic.

All references to the whole of the USSR (Russia) will be found in the section under Europe. Places definitely in Asiatic USSR (Siberia, Kazakhstan, etc.) will be listed under the appropriate country or area under Asia. Some of the latter may also be listed under USSR in the European section.

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American Repertory of Arts, Sciences, and Manufactures, [New York], E–146

American Society of Civil Engineers, Proceedings, [New York], 1–118, A–38, E–23

American Society of Civil Engineers, Transactions, [New York], K–3, K–14, K–25, K–28, K–43, K–101, K–139

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Bartlett Tree Research Laboratory, Bulletin, B–106, B–119

Beiträge zur Geophysik, [Stuttgart], 2–10, A–57, C–14, C–15, C–21, D–36, G–18, G–35, G–36, G–155, H–47, H–87, I–27, J–38, J–39, J–41, J–46, K–17, K–21, K–31, K–36, K–63, K–65, K–80

Beiträge zur Physik der freien Atmosphäre, [Strasburg], 2–11, A–80, C–22, C–39, C–55, E–269, H–34, I–2

Belgium, Institut Royal Météorologique, Mémoires, 1–45, 1–131

Bell System, Technical Journal, 1–48

Bergens Museums Årbok, Naturvitenskapelig rekke, 7–57, H–109

Berichte zur Deutschen Landeskunde, 10–160

Berlin, Akademie der Wissenschaften, Phys.-math. Kl., Sitzungsberichte, G–89

Berlin, Preussische Akademie der Wissenschaften, Sitzungsberichte, G–130

Berlin, [K.] Preussisches Meteorologisches Institut, Abhandlungen, G–122, H–12, J–48

Berlin, [K.] Preussisches Meteorologisches Institut, Veröffentlichungen, F–55

Bioklimatische Beiblätter der Meteorologischen Zeitschrift, [Brunswick], A–41, A–82, A–85

Biologia Generalis, [Vienna], 8–85

Boletin de Estudios Geográficos, [Mendoza], 5–8, 5–24, 5–89, D–236

Boletin de Meteorologia, [Montevideo], D–175

Botanical Review, B–53

British Mycological Society, Transactions, [Cambridge], B–52
British Science News, B–139, B–142
Bruxelles, Académie Royale de Médecine, Bulletin, A–46
Bulletin Agricole du Congo Belge, [Brussels], 2–148
Bulletin of Entomological Research, [London], B–121

California, Dept. of Public Works, Div. of Water Resources, Bulletin, K–151
California University, Scripps Institution of Oceanography, Technical Ser., K–24
Cambridge Philosophical Society, Biological Review, B–62
Cambridge Philosophical Society, Proceedings, 1–68, 11–127, G–45
Canada, Dept. of Transport, Meteorological Div., [Circulars and Reports], [Toronto], 1–79, 2–21, 3–16, 3–119
Canada, Meteorological Service, Memoirs, K–71
Canada, National Research Council, Reports, H–155
Canadian Aviation, [Toronto], 1–105, 1–116, C–138, C–155, I–145
Canadian Entomologist, [London, Ont.], B–132
Canadian Journal of Research, [Ottawa], 2–66, 7–133, A–188, A–189
Canadian Public Health Journal, [Toronto], A–67
Cane Grower's Quarterly Bulletin, D–221
Carnegie Institution, Papers from the Dept. of Marine Biology, B–75
Carnegie Institution of Washington, Publications, 7–134, G–96, G–129, G–133, G–141, K–19, K–121
Catholic World, [New York], E–153
Centralblatt für Bakteriologie und Parasitenkunde, [Jena], B–9
Chalmers University of Technology, Transactions, 8–143
Chemical Industries, [New York], A–177, A–220
Chemical Engineering, [Dover], A–219
Chemical Engineering Progress, A–214
Chemical Reviews, [Baltimore], C–93, C–192, K–176
Chicago University, Institute of Meteorology, Miscellaneous Reports, H–112, H–142
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Century Magazine, E–185, E–187
Ciel et Terre, [Brussels], 1–6, 5–104, 9–60, 10–13, 10–42, J–2, *see also* p. 478
Cincinnati Journal of Medicine, A–104, A–129, A–160 to A–162
Civil Engineering, [Easton, Penna.], 3–131, 6–77
Coal-Heat, [St. Louis, Mo.], A–195
Collier's A–208, A–227
Concordia Magazine, [St. Louis, Mo.], E–181
Conseil International pour l'Éxploration de la Mer, Journal, [Copenhagen], G–192
Conseil International pour l'Éxploration de la Mer, Raports et Procès-Verbaux, [Copenhagen], G–201
Country Gentleman, [Philadelphia], C–133
Current Science, [Bangalore], E–57, E–110, E–291, J–64
Czechoslovakia, Výzkumný Ústav Zemědělsky Zprávy, 10–172

Daniel Guggenheim Airship Institute, Technical Reports, [Akron, Ohio], 1–96
Deutsche Akademie der Luftfahrtforschung, Schriften, [Berlin], C–44, C–53
Deutsche Hydrografische Zeitschrift, [Hamburg], 7–79
Discovery, [London], D–31
Dove Marine Laboratory, Cullercoats, Reports, G–179

Ecological Monographs, [Durham, N. C.], 2–165
Ecology, Ecological Society of America, [Brooklyn, New York], 1–143, 1–150, 6–92, 9–119, K–66, K–104
Economic Geography, [Concord, N. H.], 2–161, D–214
Eire, Meteorological Service, Technical Notes, [Dublin], I–89
Electrical Engineering, [New York], 9–28
Electrical World, [New York], 8–29, 9–18
Electronics, [New York], 7–17
Elektrische Nachrichten-Technik, [Berlin], J–78
L'Energia Elettrica, [Milan], H–201
Engineering, [London], 11–109
Engineering Journal, Engineering Institute of Canada, [Montreal], I–29
Engineering Journal of Canada, [Toronto], A–171
Engineering News Record, [Chicago], K–69
Entomological Society of America, Annals, B–116
Entomological Society of London, Transactions, B–66, B–78, B–80, B–95
Entomologische Beihefte aus Berlin-Dahlem, B–99
Ergebnisse der kosmischen Physik, [Leipzig], A–88, J–43
Experientia, [Basel], 8–74, 8–80, E–95, E–102, E–289

Faraday Society, Transactions, [London], A–68, A–69, A–71, A–73, A–75, A–78, A–79, A–92, A–95, A–96, A–98, A–102, A–103
FIAT Review of German Science 1939–1946, [Wiesbaden], 9–1, 11–91
Finland, Ilmatieteelisen keskuslaitoksen, Toimituksia, 10–36, 10–37, 10–70, 10–125, H–98, H–168, I–92
Finska Vetenskaps Societetens Forhandlingar, Ofversigt, [Helsinki], G–20
Flight, [London], 10–77
Florida Academy of Sciences, Quarterly Journal, G–110
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Forschung auf dem Gebiet des Ingenieurwesens, [Berlin], K–81

Forschungen und Fortschritte, [Berlin], B–44, H–212
France, Centre National de la Recherche Scientifique, Journal des Recherches, 10–72, 11–20, 11–21, I–154
Franklin Institute, Journal, [Philadelphia], 1–156, 1–168, 2–25, 7–20, 8–34, C–56, D–28 E–2, G–47, H–167

Gas Journal, [London], A–29
General Electric Research Laboratory, Project Cirrus, Occasional Reports, [Schenectady, N. Y.], 1–101, 1–103, 1–109, 2–33, A–210, C–67, C–78, C–98, C–129, C–144, C–167, C–181, C–187, C–188, C–193, I–143
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Geofysiske Publikasjoner, [Oslo], 9–34, 9–51, 9–132, 11–157, C–5, C–6, C–13, C–64, C–95, G–194, G–200, H–33, H–39, H–86, I–4
Geografiska Annaler, Svenska Sällskapet för Antropologi och Geografi, [Stockholm], 1–89, 4–57, 6–56, 6–58, 6–59, 6–81, 6–87, 6–89, 7–39, 7–44, 7–61, 7–96, 7–97, 7–105 to 7–108, 8–149, F–66, G–53, G–76, G–86, G–93, G–104, G–180, G–188, G–190, G–193, J–87, K–7
Geografski Vestnik, [Ljubljana], 8–99, 8–116, 8–117, D–159
Geographical Journal, Royal Geographical Society, [London], 1–140, G–156, G–162
Geographical Review, [New York], 9–141, 11–160, D–161, D–170, G–137, G–142, G–185, K–160, K–198
Geographische Abhandlungen, [Leipzig], G–119, G–125
Geographische Gesellschaft in München, Landeskundliche Forschungen, G–136
Geographische Gesellschaft in Wien, Mitteilungen, 5–63, 5–77, 6–6, 7–63, 10–25, 10–91, 11–50
Geography, [London], A–130
Geological Magazine, [London], G–20, G–92
Geological Society of America, Bulletin, [Rochester], G–23, G–40, G–75, G–107, G–111, G–117
Geological Society of London, Quarterly Journal, G–7, G–11, G–14, G–41, G–59, G–95
Geological Survey of Great Britain and Museum of Economic Geology, Memoirs, G–2
Geologische Gesellschaft in Wien, Mitteilungen, G–71
Geologiska Föreningen i Stockholm, Förhandlingar, G–145, G–172
Geologists' Association, Proceedings, [London], 8–122, G–98
Geophysica, [Helsinki], 7–19, 7–22, 7–27, 7–30, 7–46, 7–50, 7–54, 7–64, 7–66, 10–9, 10–15, 10–16, 10–166, 10–179, 11–38, 11–57, 11–93, 11–110, 11–121, 11–122, H–186, J–103, K–158, K–159
Geophysical Magazine, [Tokyo], 1–8, 10–35, 10–52, 10–60, 10–75, 10–94, 10–106, 10–119, 10–132, 10–149, 11–73, 11–74, 11–102, 11–126, 11–140, H–50, H–221, K–60, K–199, *see also* p. 376, 552, 688
Geophysikalische Einzelschriften, [Hamburg], 10–82
Gerlands Beiträge zur Geophysik see *Beiträge zur Geophysik*
Germany, Deutscher Wetterdienst in der US-Zone, Berichte, [Bad Kissingen], 9–3, 9–6 to 9–10, 9–14, 9–19, 9–26, 9–29, 9–44, 9–47, 9–57, 9–59, 9–62, 9–66, 9–68, 9–69, 9–79, 9–80, 9–86, 9–87, 9–94, 9–95, 9–100, 9–103, 9–104, 9–107, 9–115, 9–116, 9–120, 9–149, 9–150, 9–152, 9–155, 10–28, 10–29, 10–38, 10–39, 10–56, 10–59, 10–61, 10–63, 10–68, 10–74, 10–92, 10–159, 10–177, 10–182, 11–17, 11–25, 11–26, 11–45, 11–60, 11–66, 11–98, 11–143, 11–146, 11–178, C–52, C–64, C–95, K–190
Germany, Deutscher Wetterdienst in der US-Zone, Mitteilungen, [Bad Kissingen], 8–12, 8–58
Germany, Meteorologischer Dienst der Deutsche Demokratischen Republik, Abhandlungen, 10–110, 10–111, 10–153
Germany, Meteorologischer Dienst der Deutschen Demokratischen Republik, Veröffentlichungen, 8–1
Germany, Reichsamt für Wetterdienst, Erfahrungsberichte, I–32
Germany, Reichsamt für Wetterdienst, Forschungs- und Erfahrungsberichte, Ser. A, I–60, I–82, I–83
Germany, Reichsamt für Wetterdienst, Forschungs- und Erfahrungsberichte, Ser. B, I–63
Germany, Reichsamt für Wetterdienst, Wissenschaftliche Abhandlungen, 7–16, 7–109, 8–66, 8–84, 9–148, E–83, H–94, H–113
Gesellschaft der Wissenschaften zu Göttingen, Nachrichten, G–31
Gesellschaft der Wissenschaften zu Göttingen, Nachrichten, Math.-Physik. Klasse, J–22
Gesellschaft für Erdkunde zu Berlin, Zeitschrift, G–77
Gesellschaft zur Beförderung der gesamten Naturwissenschaften zu Marburg, Schriften, J–9
Gigiena i Sanitariia, [Moscow], A–74, A–86, A–107, A–118, A–126, A–132
Gigiena i Zdorovie, B–40
Giornale di Agricoltura, [Jesi], D–231
Glavnaia Geofizicheskaia Observatoriia, Izvestiia, [Pulkovo], B–40
Göteborgs Botaniska Trädgård, Medelander, B–27
Great Britain, Meteorological Office, Geophysical Memoirs, 3–29, 3–91, 3–143, 7–131, 10–117, 11–85, E–30, E–192, G–163, H–23
Great Britain, Meteorological Office, Meteorological Reports, 3–7, 3–8, 3–82, 3–117, 3–125, 4–2, 5–60, 9–133, 11–116
Great Britain, Meteorological Office, Professional Notes, 3–33, 3–106, 3–107, 3–120, 4–11, 4–49, 10–113, G–191, H–18, I–25, I–51

Great Britain. British Museum (Natural History), Anti-Locust Research Center, Anti-Locust Memoirs, B–133, B–136
Great Britain, National Smoke Abatement Society, Proceedings, A–81, A–143, A–144, A–174, A–180, A–181

Hamburg, Jahrbuch der hamburgischen wissenschaftlichen Anstalten, F–59
Harper's Magazine, [New York], C–203
Harvard University, Astronomical Observatory, Annals, H–5, E–18
Harvard Meteorological Studies, [Cambridge, Mass.], 1–151
Harvard University, Museum of Comparative Zoology, Memoirs, G–65, G–72, G–74
Hawaiian Planters Record, 1–38
Hawaiian Volcano Observatory, Volcano Letter, F–9
Heat, the Stoker Magazine, A–152
Heating and Ventilating, [New York], 8–52, 8–53, A–135, A–148, A–192, A–194
Heating, Piping and Air Conditioning, [Chicago], 1–39, 1–69, 1–77, 1–81, 2–37, 3–130, 3–134, 6–91, A–149, A–222, A–225
Heidelberg, Akademie der Wissenschaften, Mathnaturwis. Klasse, 10–155
Helsinki University, Meteorologian laitos, Mitteilungen, 9–109, 10–78, 10–90, 10–142, 11–1, E–62, H–99, K–177
Helvetica Physica Acta, [Basel], K–144
Hemel en Dampkring, [The Hague], 1–9, 2–47, 4–23, 4–78, 9–20, 9–23, 9–64, 9–75, 9–85, 11–40, C–111, D–17, D–46, D–125, E–278, G–197, H–84, J–97, K–56, *see also* p. 478, 552
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Idöjaras, [Budapest], 1–10, 10–10, 6–16, C–117, C–182, D–13, E–59, K–165, *see also* p. 270–271, 688
India, National Institute of Sciences, Proceedings, 4–67, 4–100, 10–116, H–217
India, Meteorological Dept., Memoirs, D–140, H–69, K–32
Indian Academy of Science, Proceedings, [Bangalore], A–27, H–127
Indian Journal of Agricultural Science, [New Delhi], D–165
Indian Journal of Statistics, [Sankhyā], H–67
Indian Journal of Meteorology and Geophysics, [Delhi], 5–5, 5–26, 5–54, 5–55, 5–91, 5–121, 7–24, 7–82, 7–87, 11–78, D–137, H–239, *see also* p. 271, 376
Industrial and Engineering Chemistry, [Easton, Pa.], A–75, A–122, A–139, A–183, A–185, A–240, K–85, K–132
Industrial Chemist, [New York], A–193
Industrial Hygiene News Letter, A–200
Institute of Navigation, Journal, C–134
Institute of Radio Engineers, Proceedings, [New York], 2–22
Institute of the Aeronautical Sciences, Sherman M. Fairchield Publication Fund, Papers, I-170
Institution of Electrical Engineers, Proceedings, [London], 9–17, 9–48, 9–49
International Agro-Climatological Series, International Institute of Crop Ecology, [Washington, D. C.], 2–169, 10–171, 11–155
Iowa Farm Science, D–224
Iron Age, [Middletown, N. Y.], A–216
Istituto Talassografico, Pubblicazioni, [Trieste], 9–102

Japan, Central Meteorological Observatory, Bulletin, J–4
Japan, Central Meteorological Observatory, Reports, I–171
Journal of Aeronautical Meteorology, [Kansas City], 2–15, D–51, E–90, H–147, H–148, H–150, I–97
Journal of Agricultural Research, [Washington, D. C.], 1–85, 1–117, 1–146, B–7, B–54, K–5, K–38, K–97
Journal of Allergy, [St. Louis], B–25, B–48, B–56
Journal of Animal Science, 10–174
Journal of Applied Physics, [Menasha, Wisc.], 1–63, 1–167, 7–36, 10–135, A–190, C–136, H–182, K–193
Journal of Aviation Medicine, [St. Paul, Minn.], B–39
Journal of Bacteriology, [Baltimore], B–17, B–32, B–38
Journal of Chemical Education, [Easton, Pa.], A–176
Journal of Dairy Science, [Baltimore], 10–175, 10–176
Journal of Ecology, [London], G–148, G–150, G–171
Journal of Ecology, Amani Memoirs, [London], G–90
Journal of Economic Entomology, [Geneva, N. Y.], B–69, B–72 to B–74, B–81, B–90, B–98, B–101, B–104, B–107, B–117, B–122, B–125, B–127
Journal of Experimental Zoology, B–131
Journal of Forestry, [Washington, D. C.], 1–124, K–73
Journal of Geology, [Chicago], G–12, G–19, G–68
Journal of Geophysical Research, [Washington, D. C.], 1–11, 1–58, 1–90, 1–171, 1–174, 5–107, 7–42, 7–58, 7–128, 7–132, 8–139, 8–144, 8–145, A–59, A–234, H–190, H–213, *see also* p. 207, 208, 271, 272, 478–479
Journal of Glaciology, [London], C–58, I–137
Journal of Industrial Hygiene and Toxicology, [Cambridge, Mass.], 4–39, A–77, A–157, A–168, A–206, A–218
Journal of Marine Research, [New Haven], 4–127, 5–129, 5–131, 11–113, B–35, B–36, K–74, K–103
Journal of Meteorology, American Meteorological Society, 1–12, 2–28, 2–67, 2–69, 2–76, 2–78, 2–79, 2–80, 2–82, 2–83, 2–89, 2–120, 2–127, 2–182, 3–30, 3–40, 3–43, 3–46, 3–47, 3–50, 3–53 to 3–56, 3–87, 3–111, 3–112, 4–53, 4–59, 4–102, 5–9, 5–14, 5–32, 5–34, 5–40 to 5–44,

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Journal of Oriental Medicine, [Dairen, Southern Manchuria], A–61

Journal of Physical and Colloidal Chemistry, K–157

Journal of Science and Technology, [Wellington, New Zealand], H–35

Journal of Scientific and Industrial Research, [Delhi], 1–120, 9–40

Journal of Scientific Instruments and of Physics in Industry, The Institute of Physics, [London], 1–49

Journal of the Aeronautical Sciences, [New York], I–19, I–28, I–34, I–39, I–44, I–47, I–128, J–79

Journal Scientifique de la Météorologie, Société Météorologique de France, [Paris], 1–13, 2–27, 2–103, 2–136, 3–95, 7–18, 7–80, 7–83, 7–84, 10–136, 11–61, 11–177, *see also* p. 138, 208, 333, 553

Kulturtechniker, [Breslau], K–47

Kyoto Imperial University, College of Science, Memoirs, Ser. A, K–72

Lancet, [London], A–65

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Leipzig University, Geophysikalisches Institut, Veröffentlichungen, K–46

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Life, C–201

Lin Dansk Svensk Hörtidsskrift, D–229

Lindenberg, Preussisches Aeronautisches Observatorium, Arbeiten, J–36

Linnaean Society of London, Proceedings, G–46

London, Edinburgh, and Dublin Philosophical Magazine, J–12

London Zoological Society, Proceedings, B–88

Luftwissen, I–21

Madagascar, Service Météorologique, Publications, 8–46

Magazine of the Year, 1–108, C–141

Manchester, Literary and Philosophical Society, Memoirs, G–39

Marine Observer, Great Britain, Meteorological Office, 1–14, 4–65, 5–18, 5–123, 6–11, 6–27, 6–99, 7–7, 7–100, 8–43, 9–5, 9–24, 9–90, 9–151, 10–5, 10–6, 10–7, 11–99, H–30, H–45, *see also* p. 139, 272, 377, 689

Massachusetts Institute of Technology and Woods Hole Oceanographic Institute, Papers in Physical Oceanography and Meteorology, C–118

Massachusetts Institute of Technology, Weather Radar Research Unit, Technical Reports, I–141

Matériaux pour L'Étude des Calamités, [Geneva], D–153

Mechanical Engineering, [New York], A–133, A–184, A–213, A–217

Medical Journal of Australia, B–42

Medichnii Zhurnal, [Kiev], B–26

Mellon Institute of Industrial Research, Smoke Investigation Bulletin, [Pittsburgh], A–17 to A–26

Memoria Accademie Nuovi Lincei, Ser., [Rome], G–127

Meteorologia Pratica, [Montecassino], D–155, D–164, E–260, K–22, K–48

Meteorological Abstracts and Bibliography, [Boston], I–178

Meteorological Magazine, [London], 1–15, 2–61, 2–77, 2–117, 3–13, 3–28, 3–31, 3–61, 3–99, 3–105, 3–140, 4–80 to 4–82, 5–36, 6–8, 6–18, 6–22, 6–23, 6–44, 6–61, 6–65, 6–70, 6–102, 7–8 to 7–10, 7–90, 8–5, 8–13, 8–77, 8–141, 9–4, 9–40, 9–71, 9–81, 9–105, 10–10, 10–22, 10–41, 10–43, 10–50, 10–98, 10–133, 10–139, 10–163, 11–119, 11–136, A–35, C–81, C–122, C–142, C–152, C–196, D–77, D–99, D–122 to D–124, D–227, E–43, E–54, E–126, E–223, E–250, E–294, E–295, F–26, F–65, G–44, G–161, G–183, G–186, G–192, H–24, H–59, H–166, H–215, H–228, I–140, J–29, K–148, K–194, *see also* p. 138, 208, 272, 333, 334, 479, 553, 689, 765

Meteorological Magazine, [Nanking], G–167, H–71, H–72, H–80, K–146

Meteorological Society of Japan, Journal, [Tokyo], H–55, H–81, H–88, H–90, H–97, K–87, K–102, K–130, K–155, K–172, K–182, K–201, *see also* p. 334

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La Météorologie, Société Météorologique de France, [Paris], 1–17, 4–29, 4–103, 4–109, 4–125, 5–45, 6–96, 9–27, 9–43, 9–96, 9–97, 9–122, 9–126, 10–164, 11–44, 11–105, 11–108, 11–117, 11–131, A–233, B–19, C–158, D–84, D–118, D–162, D–181, D–219, E–254, E–283, H–149, H–157, H–181, I–20, I–55, I–71, K–64, K–77, *see also* p. 273, 334, 335, 621

Meteorologiia i Gidrologiia, Glavnoe Upravlenie Gidrometeorologicheskoĭ Sluzhby, [Moscow], 2–14, E–74, H–51, H–65, I–45, I–50, I–52, I–53, J–88, K–58, K–83

Meteorologiia i Gidrologiia, Informatsionnyĭ Sbornik, [Moscow], 2–14, K–133, K–141

Meteorologische Rundschau, [Bad Kissingen], 1–18, 1–66, 2–19, 2–26, 2–30, 2–31, 2–39, 2–40, 2–41, 2–52, 2–57, 2–58, 2–70, 2–73, 2–75, 2–88, 2–90, 2–92, 2–94, 2–97, 2–101, 2–102, 2–104 to 2–108, 2–110, 2–111, 2–119, 2–126, 2–130, 2–131, 2–133, 2–134, 2–138, 2–145, 2–150, 2–157, 2–173, 2–174, 2–176 to 2–178, 3–4, 3–5, 3–32, 3–41, 3–49, 3–52, 3–58, 3–67 to 3–69, 3–72, 3–74, 3–76, 3–78 to 3–80, 3–86, 3–88, 3–96, 3–98, 3–100, 3–101, 3–127, 3–128, 3–137, 4–6, 4–10, 4–13, 4–27, 4–31, 4–34, 4–37, 4–38,

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Meteorologische Zeitschrift, [Berlin], 2–8, C–24, C–25, C–31, C–33, C–36, C–37, C–38, C–43, C–47, C–48, C–51, D–44, D–129, D–156 to D–158, D–204, D–207, D–208, E–31, E–35, E–36, E–38, E–45, E–46, E–52, E–64, E–71, E–194, E–255, E–257, E–266, E–274, E–277, E–279, F–19, F–20, F–37, F–38, F–64, F–65, G–161, H–7, H–27, H–36, H–37, H–70, H–77, H–79, H–89, H–92, H–126, H–128, H–140, I–12, I–13, I–23, J–21, J–24, J–31, J–32, J–35, J–66, J–70, J–81, J–82, K–18, K–23, K–39, K–49, K–68, K–76, K–106

Meteorologiske Annaler, [Oslo], 1–97, 1–133, 10–87, 10–96, 10–105, 10–120, 10–131, 11–11, 11–16, H–117

Metropolitan Life Insurance Co., Statistical Bulletin, E–262

Michigan University, Greenland Expeditions, Reports, K–107

Microtecnic, [Lausanne], 10–33

Mines and Methods, [Salt Lake City], A–15, A–16

Minnesota Academy of Natural Sciences, Proceedings, E–158

Mirovedenie, [Moscow], J–19

Mississippi State Geological Survey, Bulletin, E–264

Monthly Weather Review, U. S. Weather Bureau, [Washington, D. C.], 1–19, 6–26, 6–73 to 6–75, 8–24, 8–25, 11–34, 11–36, 11–69, 11–79, A–12, A–33, A–114, A–115, B–8, B–76, C–2, C–103, C–105, D–23, D–25 to D–27, D–29, D–30, D–34, D–61 to D–65, D–67 to D–76, D–83, D–104 to D–106, D–108, D–110, D–111, D–113 to D–115, D–117, D–126, D–127, D–142 to D–144, D–146, D–147, D–149, D–172, D–174, D–192 to D–197, E–24, E–25, E–39 to E–41, E–43, E–44, E–51, E–70, E–85, E–91, E–108, E–113, E–120, E–137, E–157, E–175, E–178, E–189, E–190, E–195 to E–204, E–210, E–212, E–214 to E–216, E–220, E–222, E–224, E–227, E–228, E–231, E–233, E–235, E–238, E–240, E–242, E–245, E–246, E–249, E–252, E–261, E–276, F–12, F–15, F–21, F–62, *see also* p. 209, 273, 553, 689

Mount Washington Observatory, Icing Reports, I–96

Mount Washington Observatory, Monthly Research Bulletin, I–109, I–113

Mount Washington Observatory, Research Reports, I–156, I–163

Mount Weather Observatory, Bulletin, F–6, F–10, F–60, F–61, F–63

Mount Wilson Observatory, Bulletin, G–22

National Academy of Sciences, Journal, [Washington, D. C.], A–170

National Academy of Sciences, Proceedings, [Washington, D. C.], B–23

National Geographic Magazine, [Washington, D. C.], 1–111, C–102, F–2

National Geographic Society, Stratosphere Series, B–15, B–21

Natur und Technik, [Vienna], 9–98, 9–124, 10–185

Natural History, D–10

Nature, [London], 1–87, 1–175, 1–176, 2–45, 3–110, 3–129, 4–132, 5–3, 5–33, 7–43, 7–76, 8–42, 9–70, 9–143, 10–49, A–40, A–105, A–116, A–155, B–57, B–63, B–79, B–84, B–108, B–112, B–115, C–54, C–57, C–60, C–65, C–69, C–73, C–131, C–147, C–175, C–177, D–95, E–55, E–293, F–23, F–27, F–34, F–41, F–49, F–50, H–38, H–214, J–16, J–69

La Nature, [Paris], D–18, D–41, D–97, D–132, D–133, E–283, E–293

Nature Magazine, [Washington, D. C.], D–8, E–211

Naturforschende Gesellschaft, Berichte, G–154

Naturforschende Gesellschaft, Mitteilungen, [Bern], F–51

Naturforschende Gesellschaft in Zürich, 1–78, 4–141

Naturwissenschaften, [Berlin], E–65, E–98, E–134, G–115, J–26

Naturwissenschaftlicher Verein, Abhandlungen, [Bremen], G–147

Natuur en Techniek, [Amsterdam], C–113, C–114

Netherlands, [K.] Meteorologisch Instituut, Mededeelingen en Verhandelingen, 1–125, 1–126, 5–85, 5–115, 6–1, G–198, H–95, I–147

New Mexico College of Agriculture and Mechanic Arts, Agricultural Experiment Station, Bulletin, K–89

New Phytologist, B–49, G–164, G–165, G–175

New York Academy of Sciences, Annals, F–3, K–124

New York Academy of Sciences, Transactions, 9–125

New York State Museum, Bulletin, B–87

New York Times, C–197

New Zealand Institute, Transactions and Proceedings, F–36, F–42

New Zealand Institution of Engineers, Proceedings, 9–117

New Zealand Journal of Science and Technology, A–97, E–94

New Zealand Meteorological Office, Ser. C, 9–135

Newsweek, [Dayton, Ohio], E–117

Nimbus, [La Paz], B–140, B–144, D–189, *see also* p. 71, 209, 377
Norges Geologiske Undersøgelse, [Oslo], G–121
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Nucleonics, [New York], 11–47, 11–92
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Nuova Antologia, [Florence], D–200

Occupational Medicine, A–215
Österreichische Botanische Zeitschrift, B–5
Ohio Agricultural Experiment Station, Bimonthly Bulletin, K–94
Oil Weekly, [Houston, Texas], 3–133
Oklahoma Academy of Science, Proceedings, A–120, B–33
Optical Society of America, Journal, [Rochester], 1–154, 1–155

Pacific Science, [Honolulu], 2–128
Pacific Science Congress, Proceedings, G–79, B–34
Palestine Journal of Botany and Horticultural Science, K–62
Pennsylvania State College Studies, F–16
Petermanns Geographische Mitteilungen, [Gotha], 10–108, 10–165, G–116
Philosophical Magazine, [London], A–100, G–4, H–61
Physical Review, [New York], 1–74, 1–75, 1–94, 1–169, 1–170, 2–56, 7–127, C–12, H–165, H–196, H–245, J–104, K–13
Physical Society of London, Proceedings, 2–36, C–23, H–82
Physico-Mathematical Society of Japan, Proceedings, J–10, J–65
Physikalische Forschung, [Wolfenbüttel, Germany], 7–49, H–193
Physikalische Zeitschrift, [Leipzig], J–3, J–8, J–34, J–37, J–80
Physikalische Zeitschrift der Sowjetunion, [Kharkov], J–63
Phytopatologische Zeitschrift, [Berlin], A–121
Phytopathology, [Ithaca, N. Y.], B–10, B–20, B–29, B–41, B–50
Planta, [Berlin], B–28
Pochvovedenie, (Akademia Nauk, SSSR), 7–110, 7–112, 10–143
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Prairie Farmer, [Chicago], C–156
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Problemy Fisicheskoĭ Geografii, [Moscow], 10–81, 10–141, 10–168, G–106, K–153
Public Health Reports, [Washington, D. C.], B–45, B–51

Quarterly Journal of Mechanics and Applied Mathematics, [Oxford], 8–75, J–109, K–166, K–187
Quarterly Journal of Science, [London], E–5
Quarterly of Applied Mathematics, Brown University, [Providence, Rhode Island], 1–64
Quarterly Review, [London], J–7
Quarterly Review of Biology, [Baltimore], B–111
Quebec Province, Dept. of Lands and Forests, Meteorological Bureau, Bulletin, 1–148

La Recherche Aéronautique, [Paris], A–204, K–179
Reviews of Modern Physics, American Physical Society, [Lancaster, Pa.], 1–65
Review of Scientific Instruments, American Institute of Physics, [Rochester], 1–47, 2–32, 2–35, I–169
Revista Medicina y Ciencias Afines, [Buenos Aires], A–112
Revista Meteorológica, [Montevideo], 1–20, C–119, D–19, D–134, D–176, D–177, I–78, *see also* p. 138–139, 273, 377, 622
Revista Ştiinţifică, [Iasi, Romania], 6–68
Revue Canadienne de Géographie, 2–154, 3–115
Revue Ciel, [Bourges], D–206
Revue de Géographie Régionale, [Lyon], D–38
Revue d'Hygiène et de Médecine Sociales, [Nancy], A–83
Revue pour l'Étude des Calamités, [Geneva], D–53, D–212, E–273, E–292
Rivista Aeronautica, [Rome], I–57
Rivista di Ecologia, 8–100
Rivista di Meteorologia Aeronautica, Associazione Culturale Aeronautica, [Rome], 1–21, 4–19, 4–20, 4–24, 4–101, 4–106, 7–73, 8–17, 8–35, 8–136, 9–16, 11–23, 11–138, E–80, H–62, H–118, I–31, I–46, I–64, *see also* p. 553, 766
Rough Notes, [Indianapolis], D–159, E–230, E–280
Royal Aeronautical Society, Journal, I–21
Royal Anthropological Institute, Journal, G–94
Royal Astronomical Society, Monthly Notices, Geophysical Supplement, [London], J–33
Royal Dublin Society, Scientific Proceedings, A–23, A–127
Royal Engineers Journal, [Chatham], G–5
Royal Entomological Society of London, Transactions, B–105, B–124, B–135
Royal Geographical Society, Research Series, [London], G–181
Royal Meteorological Society, Quarterly Journal, 1–22, 1–112, 2–17, 2–60, 2–68, 2–71, 2–72, 2–81, 2–96, 2–98, 2–112, 2–122, 2–123, 2–132, 2–141, 2–143, 3–6, 3–17, 3–59, 3–62, 3–90, 3–108, 3–109, 4–42, 4–90, 6–21, 6–40, 6–45, 6–66, 6–88, 7–6, 7–71, 9–53, 9–55, 9–56, 9–88, 9–89, 9–101, 9–108, 9–112, 10–134, A–28, A–39, A–87, A–131, A–145, A–187, A–198, A–199, A–209, B–130, C–18, C–45, C–46, C–82, C–90, C–96, C–97, C–151, D–37, D–39, D–60, D–66, D–80, D–85, D–89, D–90, D–91, D–92, D–103, D–107, D–112, D–130, D–216, E–21, E–53, E–68, E–69, E–272, E–285,

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Royal Society of Edinburgh, Proceedings, B–4, G–39

Royal Society of Edinburgh, Transactions, G–102

Royal Society of London, Philosophical Transactions, B–109, C–3, G–177

Royal Society of London, Proceedings, 1–60, 1–67, 1–88, 1–91 to 1–93, 1–95, 1–172, 1–173, 2–179, 5–29, 5–130, 9–93, 10–54, 10–55, 10–58, 10–104, A–36, B–13, C–8, C–9, C–59, E–27, E–28, G–38, G–97, H–63, H–108, J–15, J–76, J–110, J–111, K–9, K–45, K–122, K–145, H–156, K–173, K–181, K–188

Royal Society of New South Wales, Journal and Proceedings, G–105

Royal Society of South Africa, Transactions, 8–96

St. Louis Public Library, Monthly Bulletin, A–31

Saturday Evening Post, C–135

Schweizerische Gesellschaft für Naturwissenschaften, Denkschriften, G–57

Schweizerische Landwirtschaftliche Zeitschrift, 8–30

Schweizerische Naturforschende Gesellschaft, Denkschriften, 11–104, 11–115, F–7

Schweizerische Naturforschende Gesellschaft, Verhandlungen, K–136, K–137

Schweizerischer Elektrotechnischer Verein, Bulletin, 8–140

Science, American Association for the Advancement of Science, [Cambridge], 1–44, 2–166, A–179, B–18, B–30, C–121, F–5, F–45, F–48

Science and Culture, [Calcutta], C–74, C–159

Science Digest, C–130, C–195

Science et Vie, [Paris], C–128, D–209

Science Illustrated, 3–123, 5–106, 6–52, C–127

Science News Letter, [Washington, D. C.], 1–70, C–199, D–86, D–98

Science Series, [Boston], E–154

Science Progress, Quarterly Review of Current Scientific Investigation, [London], 1–100, 8–121, H–250

Scientific Agriculture, [Ottawa], 11–86

Scientific American, [New York], A–30, 4–133, C–106

Scientific Monthly, [New York], 2–91, A–238, B–14, E–219

Scottish Geographical Magazine, [Edinburgh], G–123

Seewart, Nautische Zeitschrift, [Hamburg], E–60

Seismological Society of America, Bulletin, [Stanford], J–90

Semana Medica, [Buenos Aires], A–124

Smithsonian Contributions to Knowledge, [Washington, D. C.], E–148

Smithsonian Institution, Annual Reports, [Washington, D. C.], G–17, G–20, G–73

Smithsonian Miscellaneous Collections, [Washington, D. C.], A–14, F–1, G–103, G–184, G–187

Smoke Prevention Association of America, Proceedings, [Detroit], A–117, A–167, A–207, A–211

Smokeless Air, [Pittsburgh], A–108, A–125, A–137, A–172, A–197, A–229, A–232, A–237

Sociedad Geográfica de Lima, Boletin, C–157

Societas scientiarum Fennica, Commentationes physico-mathematicae, H–22

Société de Biogéographie, Comptes Rendus, Sommaire des Scéances, [Paris], B–24

Société des Sciences et des Lettres de Varsovie, Comptes Rendus, [Warsaw], 1–46

Société Entomologique de France, Annales, B–12

Société Météorologique de France, Annuaire, F–53

Société Vaudoise des Sciences Naturelle, Bulletin, [Lausanne], 1–134, D–215, E–288, E–290

Society of Automotive Engineers, Journal, I–108

Society of Automotive Engineers, Transactions, I–72

Soil Conservation, U. S. Dept. of Agriculture, Soil Conservation Service, [Washington, D. C.], 1–115

Soybean Digest, D–223

Spain, Servicio Meteorológico, Ser. A, [Barcelona], K–84

Sphère, C–132

Station Central Suisse de Météorologique, Annales, see Switzerland, Meteorologische Zentralanstalt, Annalen,

Strand Magazine, [London], E–184

Sugar Bulletin, [New Orleans], C–145

Svensk Botanisk Tidskrift, [Stockholm], B–47

Svenska Hydrografisk-Biologiska, Skriften, [Göteborg], G–128

Sweden, Meteorologiska och Hydrologiska Institut, Meddelanden, Ser. B, H–146

Switzerland, Meteorologische Zentralanstalt, Annalen, 7–21, 10–84, 10–85, 10–128, 10–183, D–178, J–13

Taihoku Imperial University, Journal, [Formosa], H–85

Technisches Gemeindeblatt, [Berlin], A–101

Tectona, [Buitenzorg, Java], G–153

Tellus, Svenska Geofysiska Föreningen, [Stockholm], 1–23, 2–16, 2–48, 2–49, 2–74, 2–84 to 2–86, 2–100, 2–149, 3–145, 4–22, 4–46, 4–66, 5–113, 6–35 to 6–38, 6–42, 6–106, 7–59, 11–49, 11–51, 11–58, 11–59, 11–62, 11–65, 11–71, 11–84, 11–141, 11–142, C–168, C–169, H–205, H–226, *see also* p. 72, 274, 275, 378, 689

Tennessee Academy of Science, Journal, E–251

Terrestrial Magnetism and Atmospheric Electricity, [Washington, D. C.], *see also* Journal of Geophysical Research

Texas Agricultural Experiment Station, Bulletin, K–37

Tiflis University, Publications, H–46

Time, [New York], A–224, C–179

Tôhoku University, Science Reports, 5th Ser., Geophysics, C–88, C–89, K–204

Tokyo University, Geophysical Institute, Collected Meteorological Papers, E–116
Torrey Botanical Club, Bulletin, [New York], B–46
Transcontinental and Western Air, Inc., Meteorological Dept., Technical Notes, [Kansas City], H–105, H–111, H–134, I–69, I–77
Tropical Agriculture, [Trinidad], K–138
Tycos Rochester, 2–12, D–33, D–128, D–198, E–267

Die Umschau in Wissenschaft und Technik, [Frankfurt a.M.], C–110, E–76
United Airlines, Meteorological Dept., Circulars, H–102, H–103
U. S. Air Force, Cambridge Research Laboratories, Geophysical Research Papers, 7–37, 7–135, J–108
U. S. Air Materiel Command, Aeronautical Ice Research Laboratory, Engineering Reports, I–107, I–112, I–124, I–126, I–138
U. S. Air Materiel Command, Technical Reports, C–68, C–75, C–146, I–119 to I–121, J–129
U. S. Air Weather Service, Reports, H–131, H–135, H–145, I–86
U. S. Air Weather Service, Technical Reports, 11–35, H–229
U. S. Bureau of Mines, Bulletin, A–34, A–123
U. S. Bureau of Mines, Technical Papers, A–128
U. S. Central Air Documents Office, Technical Data Digest, I–164, I–165
U. S. Dept. of Agriculture, Bulletin, B–71
U. S. Dept. of Agriculture, Bureau of Soils, Bulletin, G–21
U. S. Dept. of Agriculture, Foreign Agricultural Reports, 5–94
U. S. Dept. of Agriculture, Technical Bulletins, K–29, A–205, B–120, K–117
U. S. Dept. of Agriculture, Yearbooks, E–50, E–186
U. S. Forest Service; Northern Rocky Mountain Forest and Range Experiment Station, Missoula, Montana, Station Papers, 1–110, C–186, H–222
U. S. Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado, Reports, 6–78
U. S. Geological Survey, Monographs, G–67
U. S. Geological Survey, Professional Papers, G–82
U. S. Geological Survey, Water-Supply Papers, K–34
U. S. National Advisory Committee for Aeronautics, Preliminary Reports, I–5
U. S. National Advisory Committee for Aeronautics, Research Memoranda, I–159, I–166
U. S. National Advisory Committee for Aeronautics, Technical Memoranda, I–8, I–35, I–36
U. S. National Advisory Committee for Aeronautics, Technical Notes, 2–32, 11–13, H–119, H–171, H–219, H–227, I–7, I–10, I–15, I–61, I–123, I–130 to I–134, I–136, I–144, I–148, I–149, I–153, I–158, I–160, I–161, I–167, J–98
U. S. National Advisory Committee for Aeronautics, Wartime Reports, I–76, I–90
U. S. National Bureau of Standards, Journal of Research, 2–63, 10–14
U. S. National Bureau of Standards, Technical News Bulletin, 2–38, 2–64
U. S. Public Health Service, Bulletin, A–53, A–55
U. S. Public Health Service, Reports, A–54
U. S. Signal Service, Notes, E–155, E–156
U. S. Signal Service, Professional Papers, E–6, E–7, E–10
U. S. Weather Bureau, Bulletin, H–4
U. S. Weather Bureau, Research Papers, C–140, C–171, C–172
U. S. Weather Bureau, Technical Papers, 2–159, H–189
U. S. Weather Bureau, Technical Reports, K–203
U. S. Weather Bureau, Hydrometeorological Reports, [Vicksburg, Miss.], H–172
U. S. Yearbook of Meteorology, [Washington, D. C.], E–119
Uppsala, [K.] Universitetet, Meteorologiska Institutionen, Meddelande, 10–118
Utah, Academy of Sciences, Arts and Letters, Proceedings, 1–123
Utah University, Bulletin, G–182
Uspekhi Fizicheskikh Nauk, [Moscow], J–49

Veldtrust-Nuus, D–220
Verein für Wasser-, Boden-, und Lufthygiene, Kleine Mitteilungen, A–62, A–90
Vereinigung von Freunden der Astronomie und kosmischen Physik, Mitteilungen, [Berlin], F–58
Vienna, Akademie der Wissenschaften, Sitzungsberichte, 1–73
Vienna, [K.] Akademie der Wissenschaften, Math.-Naturw. Klasse, Sitzungsberichte, E–34, J–5
Vienna, [K.] Akademie der Wissenschaften, Math.-Naturw. Klasse, Denkschriften, G–66, I–1
Le Vrai Cognac, New Series, D–21
Vsesoiuznoe Geograficheskoe Obshchestvo, Izvestiia, [Moscow], 1–24, 1–40, 2–155, 5–124, 5–128, 6–76, 10–109, 10–129, 10–167, *see also* p. 72, 766–767

Wasser- und Energiewirtschaft, [Zurich], 10–127
Wasserkraft und Wasserwirtschaft, [Munich], K–70
Weather Development and Research Bulletin, [Melbourne], 11–37, 11–81, 11–118, 11–137, D–54, D–100, D–135, D–136
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MALCOLM RIGBY, Editor

Volume 1, 1950

Published monthly at Prince and Lemon Streets, Lancaster, Pa., by the AMERICAN METEOROLOGICAL SOCIETY, 3 Joy Street, Boston 8, Mass.

Printed and issued by: The Lancaster Press, Inc.

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